



# Appraisal of Weight Criticism: Associations with Physical Activity among Preadolescent Children



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## Introduction

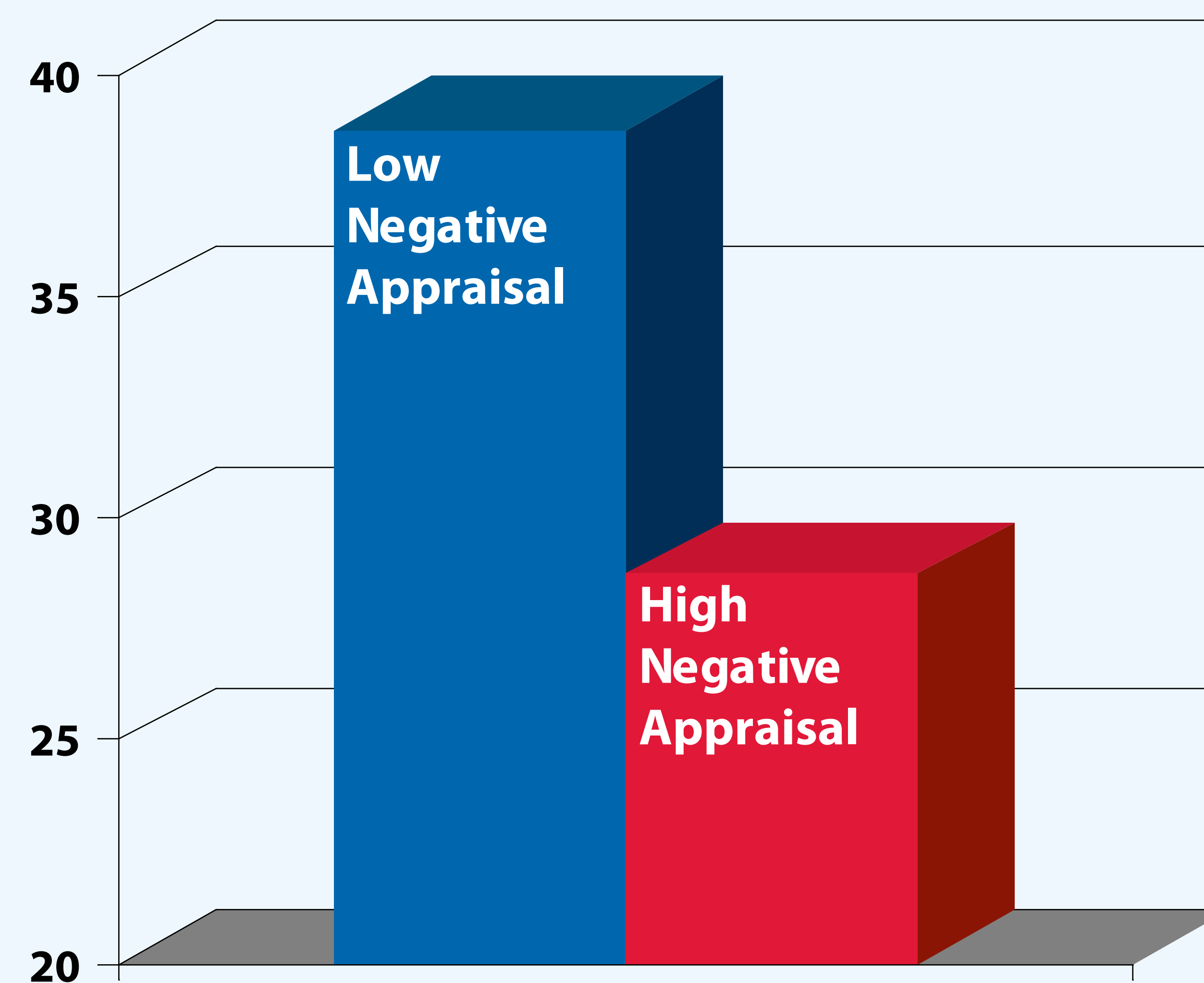
- Recent research has highlighted the importance of physical activity in the maintenance of healthy weight among children and adolescents.
- Unfortunately, research suggests that physical activity is decreasing among children ages 10 to 15, a time period thought to be critical in the development of overweight in adolescence.
- Research suggests that negative peer interactions, specifically weight-related criticism, may affect children's propensity for physical activity (Faith, Leone, Ayers, Heo, and Pietrobelli, 2002).
- While the main effects of weight-related criticism on physical activity have been investigated, few studies have addressed the influence of individual appraisal of weight criticism during physical activity.
- This study examined the influence of the degree to which children are upset by criticism on physical activity levels.
- It was hypothesized that children who experience more criticism from peers *and* were more upset by this criticism would engage in fewer physical activities than those experiencing similar criticism but who were less upset by negative peer interactions.

## Method

- 380 elementary school children were recruited through five Midwestern public elementary schools.
- Measures included the *Self-Administered Physical Activity Checklist* (Sallis et al., 1996) and a six-item teasing during physical activity measure with an accompanying appraisal question for each teasing item (Faith et al., 2002). A weighted teasing score was computed for each child, allowing the degree to which the child was upset by the teasing to be accounted for.
- Children whose parents gave consent for participation were asked to complete the aforementioned questionnaires in a classroom at their individual schools. Research assistants read each measure aloud to the students to ensure comprehension of each question.

## Analyses and Results

- A preliminary regression analysis was conducted to determine the influence of weight criticism during physical activity prior to accounting for appraisal of the criticism experience.
- Weight criticism during physical activity alone did not significantly predict number of physical activities engaged in over three days,  $F(1,378) = .110, p = n.s.$
- A regression analysis was then conducted to examine the primary study hypothesis, specifically, that a significant association would exist between teasing scores weighted to account for appraisal and total number of physical activities engaged in over a three day period.
- Results supported the study hypothesis for girls only, suggesting that girls who are more upset by teasing during physical activity engage in significantly fewer physical activities over a three day period than do their peers who are not as upset by weight criticism,  $F(2,173) = 4.047, p < .05.$



**Average Number of Physical Activities over Three Days for Girls Experiencing High Criticism During Physical Activity**

## Conclusions

- These findings indicate that individual appraisal of weight criticism during physical activity may be associated with engagement in health behaviors (physical activity).
- These results highlight the need for efforts to prevent weight criticism among school-aged children.
- Results also suggest that girls may be a greater risk for lower physical activity levels if they are more upset by peer criticism during physical activity.

## Implications

- Interventions designed to limit the effects of weight criticism on physical activity should address children's appraisal of weight criticism
- Efforts to increase physical activity among children may be augmented by initiatives designed to mitigate the negative effects of weight criticism.
- Girls may be more likely to perceive weight criticism during physical activity as hurtful and decrease their physical activity level as a result.

## References

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